

REMARKS

Claims 1-8, 12 and 14-35 are pending in this application. Claim 1 has been canceled. No claims have been added.

Objection to the Specification

The Examiner objects to the specification for allegedly not including Table 3. Applicants traverse the objection and respectfully request the withdrawal thereof.

Applicants submit that Table 3 is in the specification at page 35. Apparently, the Examiner has overlooked this table. As such, Applicants respectfully request that the objection be withdrawn.

Rejections under 35 USC 102 and/or 103

The Examiner rejects claims 1-8, 12 and 14-35 as anticipated by or in the alternative made obvious by Ito et al. U.S. Patent 5,548,022. The Examiner finds that the system disclosed in Ito et al is identical to the instant invention. Applicants traverse the rejection and respectfully request the withdrawal thereof.

Applicants submit that the instant invention is patentable over Ito '022. Ito '022 discloses a dispersion comprising (A) a reaction product of a polyfluoroalkyl group-containing compound with an isocyanate compound and (B) an addition polymer, water

and an organic solvent. However, Ito '022 is silent on the polymer recited in the instant claim 2. The polymer of instant claim 2 has the specified combination of the repeating units. The copolymer of instant claim 2 has the repeating units (I) and (II) or (III).

Applicants submit that the copolymer of instant claim 2 is quite different from both the reaction product (A) and the addition polymer (B) disclosed in Ito '022. The reaction product (A) in Ito '022 is formed from the polyfluoroalkyl group-containing compound and the isocyanate compound. Applicants also submit that the isocyanate compound of Ito '022 is different from the monomer defined in the repeating units (II) and (III) of instant claim 2, because the isocyanate compound of Ito '022 does not have the carbon-carbon double bond which is essential in the monomer defined in the repeating units (II) and (III) of instant claim 2.

Moreover, the addition product (B) of Ito '022 is also different from the copolymer defined in instant claim 2. For example, the explanation of the addition product (B) is silent on the urethane or urea bond (included in the repeating units (II)) and on the monomer, which gives a homopolymer having a glass transition temperature of 50°C or less (included in the

repeating units (III)). In addition, Ito '022, at column 5, lines 38-39 and claim 3, describes "As such a polymerizable monomer, the one containing no Rf group is preferred."

Therefore one of ordinary skill in the art would know that Ito '022 intends to exclude the Rf group, which is essential in the present invention, from the addition polymer (B).

The present invention can achieve an advantageous effect which cannot be achieved by Ito '022. The composition of the present invention can impart the high water and oil repellency, even if the composition is dried at a low temperature, such as room temperature, as described in page 2, lines 5-7 of the specification. In contrast, the working Examples of Ito '022 use a high temperature drying of 130°C. (See, Examples 1 to 11 of Ito '022.)

As such, Applicants submit that the present invention is patentable over Ito '022. Also, as Applicants have addressed and overcome all objections and rejections, Applicants submit that the claims should be allowed.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kecia Reynolds (Reg. No. 47,021) at the telephone number of the undersigned below, to conduct an interview

in an effort to expedite prosecution in connection with the present application.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.


Pursuant to the provisions of 37 C.F.R. § 1.17 and 1.136(a), Applicants hereby petition for an extension of two (2) months to October 9, 2001 for the period in which to file a response to the outstanding Office Action. The required fee of \$390.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By


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Attachment: Version with Markings to Show Changes Made
Table 3

(Rev. 02/12/01)



Appl. No. 09/355,673

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claim 1 is canceled.

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TC 1700

The claims are amended as follows:

12. (Amended) A composition according to claim 2 [1], wherein said film-forming auxiliary is at least one solvent selected from the group consisting of glycol ethers, esters and diesters.

14. (Amended) A composition according to claim 2 [1], which is in the form of an aqueous dispersion of the copolymer dispersed in a medium comprising water in the presence of a cationic emulsifier.

15. (Twice Amended) A water and oil repellent comprising a composition as claimed in claim 2 [1].

17. (Twice Amended) A water and oil repellent which is in the form of an emulsion comprising a composition as claimed in claim 2 [1].

21. (Twice Amended) A water and oil repellent in the form of foam or mousse comprising a composition as claimed in claim 2 [1].

23. (Twice Amended) A method for imparting water and oil repellency to a substrate comprising applying a composition as claimed in claim 2 [1] on said substrate by spraying, coating or dipping using water.

25. (Twice Amended) A water and oil repellent in the form of an aerosol comprising a composition as claimed in claim 2 [1].

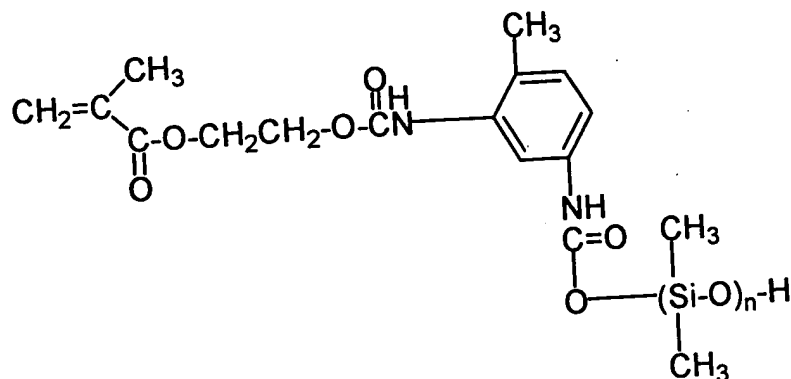
28. (Twice Amended) A method for imparting water and oil repellency to a substrate comprising spraying a composition as claimed in claim 2 [1] on said substrate using water.

29. (Twice Amended) A water and oil repellent in the state of a solid comprising a composition as claimed in claim 2 [1].

31. (Twice Amended) A water and oil repellent in the form of a paste comprising a composition as claimed in claim 2 [1].

33. (Twice Amended) A method for imparting water and oil repellency to a substrate comprising applying a composition as claimed in claim 2 [1] on said substrate using water.

The chemical formula of the product U3 was considered as follows:



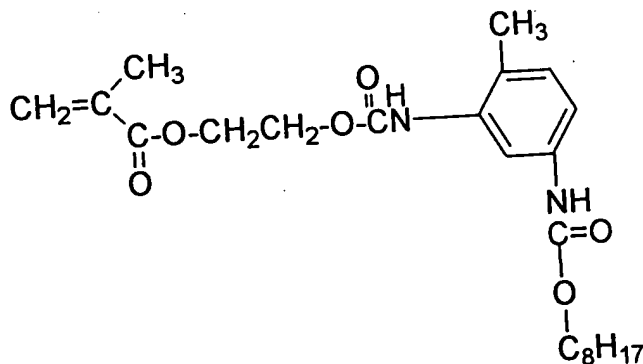
wherein the average of n is 10.

The monomers shown in Table 3 were used in the following Preparative

5 Examples.

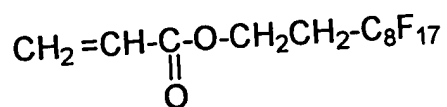
Table 3

Monomer a



10

Monomer b



Preparative Example 4